

In re Application of: Ariel PELED et al.
Serial No.: 10/815,764
Filed: April 2, 2004
Final Office Action Mailing Date: May 11, 2010

Examiner: Navneet K. AHLUWALIA
Group Art Unit: 2166
Attorney Docket: 27655
Confirmation No.: 9948

REMARKS

Reconsideration of the above-identified Application in view of the remarks following is respectfully requested.

Claims 1-25, 27-40, 49-59, 61 and 62 are pending in the Application. Claims 1-25, 27-40, 49-59, 61 and 62 have been rejected.

Rejections 35 U.S.C. §103

Claims 1 – 25, 27 – 40, 49 – 59, 61 and 62 are rejected under 35 U.S.C. §103.

The rejections are respectfully traversed.

Claim 1 is rejected under 35 U.S.C. §103 on the basis of Zuk combined with Whiting and Redlich.

Examiner states that the claimed feature of:

"transforming each item of said set of prestored information items whose distribution it is desired to control from a first representation format into a respective format facilitating a first comparison, said first comparison being fast in relation to a second relatively slower textual comparison, in accordance with a predetermined transformation format, said predetermined transformation format being preservative of meaning;"

is taught in Zuk paragraphs 4 and 9.

However Zuk paragraphs 4 and 9 do not mention transforming an item of a set of prestored information items whose distribution it is desired to control.

Rather, Zuk paragraph 4 does not teach transformation of anything.

Zuk paragraph 9 teaches changing an address. However in Zuk paragraph 9, all addresses are converted to the address of the firewall. Thus the conversion is not preservative of meaning, contrary to the requirement of the claim of

"said predetermined transformation format being preservative of meaning".

Rather all the individual meanings carried in the set of addresses is lost and all the packets appear to originate from the same place.

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That is to say, individual meaning is lost. This is done deliberately in Zuk to prevent hackers from learning legitimate IP addresses and being able to forge them.

For this reason alone, it is respectfully submitted that the rejection based on Zuk be withdrawn.

Since the feature of a transformation that is preservative of meaning is not taught in Zuk, and the Examiner does not even allege that it is taught in Whiting or Redlich, it is respectfully submitted that the claim is novel and inventive in view of the cited prior art.

Irrespective of the above, the claim further defines:

"transforming said passing information sequences obtained from said digital medium, into said format facilitating fast comparison in accordance with said transformation format".

The Examiner points to Zuk paragraph 10 to teach this feature. However Zuk paragraph 10 merely teaches:

"Packet filtering firewalls are relatively inexpensive and do not interfere with network performance, but alone they cannot typically provide adequate security. Packet filtering rules become unmanageable in complex environments, provide no user authentication mechanisms, and are vulnerable to attacks such as IP spoofing. For example, if a hacker can figure out a trusted IP address, the hacker may forge an IP header to a harmful packet. Being unable to differentiate between a valid packet and a forged one, a packet filtering firewall would not reject the harmful packet."

All the above passage teaches is that a hacker can forge a trusted IP address, but if I hide the information then he cannot. It is not apparent what connection this has to the claimed feature of transforming into *a format facilitating fast comparison* in accordance with *a transformation format*.

Thus for this reason alone, separately from the above, it is believed that claim 1 is novel and inventive over the combination of Zuk, Redlich and Whiting.

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Claim 1 further requires:

"determining the presence of one or more of said prestored information items within said transformed information sequence, said determining comprising:

comparing respective information sequences in said format facilitating said relatively fast comparison with said prestored information items in said format facilitating said relatively fast comparison;

when a match is found between said formats facilitating said relatively fast comparison then carrying out said second relatively slower textual comparison between said respective prestored information item in said first representation format and a respective information sequence obtained from said digital medium,".

The above passage is alleged by the Examiner to be taught in Zuk paragraphs 24 and 25.

However, Zuk paragraphs 24 and 25 merely teaches that firewalls are inadequate and there is need for intrusion detection systems. There is no explicit indication that either of the two actually carries out a search relating to content, contrary to the requirement of the claim. There is no explicit teaching that both of them carry out searches relating to content, and there is certainly no teaching that there are two searches which are in any way connected, say by one being faster than the other, or one depending on the results of the other.

Specifically, there is no teaching that a first fast search is made, and then the results getting through the first search are passed on to the second more detailed search, contrary to the requirements of the claim.

In Zuk paragraphs 24 and 25 there is no teaching of a specific relationship between the firewall and the intrusion information system. The intrusion information system could be placed first or second as per paragraph 25 line 9.

Thus Zuk fails to teach the two-level search, contrary to the requirements of the claim.

For this reason alone it is submitted that claim 1 is novel and inventive over the combination of Zuk, Whiting and Redlich.

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The above three points of inventiveness combined certainly provide for an allowable claim.

The Examiner then admits, contrary to the arguments presented above, that Zuk combined with Redlich does *not* disclose the fast comparison of formatted files and slower comparison if a match is found.

For this purpose the Examiner points to Whiting paragraphs 80 and 81. Whiting does teach two different searches at two different levels, the second being carried out only if the first has been successful.

However Whiting paragraphs 80 and 81 fails to teach two different searches carried out on *two* different *formats* of the *content*. Whiting paragraph 80 does talk about searching at two levels. However the first level is not a fast search format, and the second level is not the complete content, contrary to the requirement of the claim.

As discussed in Whiting paragraph 77, the first level is a *subset* of bits of the material in the file to be compared, which bits are *randomly selected*. Random selection of bits is a far cry from a "format for rapid search". The second level comprises the remaining bits not included in the first level – See Whiting paragraph 77 lines 6–14. A level made up of remaining bits is hardly a full textual search.

It is accepted that the second level search is slower than the first level search. However it is not a textual search. All the searches in Whiting are bit-level searches, not textual searches. Indeed there is no requirement in Whiting that the files are text at all. Whiting is applicable to image or other files.

Thus even if the two level search of Whiting were to be applied to the transformation of addresses in Zuk, and applicant is not sure how this could in fact be done, there is no teaching of:

"comparing respective information sequences in said format facilitating said relatively fast comparison with said prestored information items in said format facilitating said relatively fast comparison;

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when a match is found between said formats facilitating said relatively fast comparison then carrying out said second relatively slower textual comparison between said respective prestored information item in said first representation format and a respective information sequence obtained from said digital medium,".

This is because, neither in Zuk nor in Whiting, is anything compared with a prestored information item whose distribution it is desired to control. Zuk just changes all the addresses to that of the firewall, so that no-one can obtain any information about the addresses. Whiting simply tries to determine whether one file to be backed up is a duplicate of another.

It is true that all the data Whiting is dealing with is prestored, but that does not render it "prestored information items whose distribution it is desired to control."

Since in Zuk, the addresses are of no interest, the idea is to hide the addresses, it is not apparent why the skilled person, considering Zuk, would look for Whiting to provide two level bit analysis to improve his search. The reader of Zuk knows in advance that any search is futile since all his modified addresses merely point to the same firewall.

Since a search is futile in Zuk, the skilled person has no motivation to look at Whiting to find a two level search to improve the speed of the futile search.

For each of the above reasons, claim 1 is believed to be novel and inventive over the totality of the citations.

The same comments are believed to apply to claim 49, which is also believed to be allowable in light of the combination of Zuk, Whiting and Redlich.

Thus the independent claims are believed to be novel and inventive. The dependent claims are believed to be allowable as being dependent on the main claims.

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In view of the above amendments and remarks it is respectfully submitted that claims 1-40, 49-59, 61 and 62 are now in condition for allowance. A prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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